IN THE DRAWINGS:

Please enter the attached corrected drawings Fig. 6, in which a textural label "DB" is being added to each database element, and a broken line is being added between element 61 and element 64, to replace Fig. 6 as originally filed. A Letter to Draftsperson is also submitted herewith.

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated July 10, 2006. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 8-13 are under consideration in this application. Claims 1-7 are being cancelled without prejudice or disclaimer. New claims 8-13 are being added.

The drawings and the claims are being amended to correct formal errors and/or to better recite or describe the features of the present invention as claimed. All the amendments to the claims are supported by the specification, especially on page 11, 2nd paragraph. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Formality Rejection

Fig. 16 was objected to for lacking textural labels. However, since Fig. 16 has no elements needing any textural label, Applicants assume that the examiner meant Fig. 6. As indicated, Fig. 6 is being amended as required by the Examiner. Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

Prior Art Rejection

Claims 4-7 were rejected to under 35 U.S.C. §102(e) as being anticipated by US 2003/0100996 of Yang et al. (hereinafter "Yang"), and claims 1-3 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Yang in view of US 2002/0194201 of Wilbanks et al. (hereinafter "Wilbanks"). These rejections have been carefully considered, but are most respectfully traversed.

The data search system of the invention (for example, the embodiment depicted in Fig. 1; pp. 8-11), as recited in claim 8, comprising a data center 13 for distributing data and a user's facility 17 for receiving the data distributed from the data center 13 to use the data for a data search. The data center 13 includes: means for downloading data from a plurality of databases 11; means for generating link information among the plurality of databases 11,

based on the downloaded data; means for generating detailed information (Fig. 3) of each data entry, based on the downloaded data; means for generating data for homology search of said each data entry, based on the downloaded data; a route table (e.g., Fig. 5) defining a data search rule for searching data of interest in the databases 11; and means for distributing to the user's facility "the link information, the detailed information of said each data entry, the data for homology search (i.e., "index information" of the invention defined in p. 8, last paragraph)", and the route table. The user's facility 17 includes: means for conducting the data search using the link information, the detailed information of said each data entry, the data for homology search, and the route table distributed from the data center.

As recited claim 12, the route table stores the data search rule which restricts searches only along links following an origin of said data of interest as defined therein (p. 11, 2nd paragraph). Databases 61 and 63 correspond to each other as indicated by a link 62 connecting therebetween, assuming that a database 61 was recently created based upon the data stored in the database 63. Only such link information that follows the origin of the data (63 -> 61) of interest is utilized to search the data B in the database 63 linked from data A database 61. As another example, as the data of origin of D3 flows from C1 which in turn flows from A1. The data search follows from databases A-> C-> D ("*As a result, gene data D3 in the database D that corresponds to gene data A1 in the database A can be acquired.*"), but not to database B. The Database B is relevant only to Database D since the data origin relationships between B1 <-> D1 and B2 <-> D2 (p. 11, last paragraph; Fig. 7)

As recited in claim 13, the means for conducting the data search in the user's facility conducts the data search without following links of routes which are not defined in the search rule following an origin of said data of interest, even if there is other link information between said each data entry defined in the route table (such as link information rated to another database 64; p. 11, 2nd paragraph).

The data center 13 accesses public databases to create index information including link information, detailed description information, data for homology searching, etc. to send to the user's facility the index information together with a route table storing suitable search orders of the databases. The user's facility utilizes the index information and the route table sent from the data center to conduct the data search. According to the present invention, the user's facility does not need to access the public databases directly to conduct the data search. Therefore, the problems related to a data collecting time, a network occupation, and disconnection of a network line and so on can be solved. In addition, the data search is

carried out in the proper order based on the search order stored in the route table, the search speed and the search accuracy can be increased. As such, users can eliminate troublesome tasks such as a putting unnecessary data in order by themselves.

Most importantly, "by *limiting the link between the databases, the acquisition of unwanted data that produces noise, as described with reference to Fig. 22, can be limited, so that only appropriate data can be acquired* (p. 11, last 2 lines)" according to the present invention.

In contrast, the index data of Yang (p. 3, 2nd to the last paragraph of the outstanding Office Action) is about pathways (e.g., Fig. 1) representing *"specific interactions between any two proteins or molecules* ([0055])," which has nothing to do with "an origin of said data of interest" according to the present invention. Yang has to speculate the pathways/links by correlation coefficients or user specified thresholds ([0079]). On the other hand, the determination of the origin of data of interest according to the present invention is straight-forward and unambiguous, since data is either copied or not copied from a suspect source. Yang's index data is essentially different form the link information of the present invention which includes links following an origin of said data of interest.

Since Yang does not concern links following an origin of said data of interest, Yang does not "restrict searches only along links following an origin of said data of interest (claim 12)" or "search without following links of routes which are not defined in the search rule following an origin of said data of interest, even if there is other link information between said each data entry defined in the route table (claim 13)", as in the present invention. Yang's operation is similar to the conventional technique whose problems are addressed in accordance with the present invention. According to Yang, there still remain problems related to data collecting time, a network occupation and disconnection of a network line, and users having to put unnecessary data in order by themselves, all of which is very troublesome.

Wilbanks was relied upon by the Examiner (p. 9, 4th paragraph of the outstanding Office Action) to teach downloading data from plural databases and link between two databases. However, Wilbanks fails to compensate for Yang's deficiencies. Similar Yang, Wilbanks' data search method is too complex and cumbersome.

Applicants contend that neither Yang, Wilbanks, nor their combination teaches or suggests each and every feature of the present invention as recited in independent claim 7. As

such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.
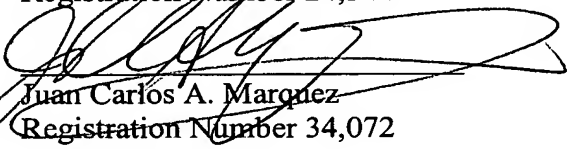
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention and the prior art references upon which the rejections in the Office Action rely, Applicant respectfully contends that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and telephone number indicated below.

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